CIRCUITS AND METHODS FOR REPAIRING DEFECTS IN MEMORY DEVICES

## **REMARKS**

This paper responds to the Advisory Action mailed on April 23, 2007.

Claims 13, 48, 58, 59, 61-63, 65, and 78 are amended. Claims 13-16, 48-65, and 76-78 remain pending in this application.

Applicant maintains all arguments presented in the previous amendment and responses. However, to expedite prosecution, Applicant submits further arguments below.

## §103 Rejection of the Claims

Claims 13-16, 48-65 and 76-78 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Namekawa (U.S. 6,115,301).

Applicant respectfully traverses for at least the reasons presented below.

Applicant believes that independent claim 13, as amended, is patentable over Namekawa because Applicant is unable to find in Namekawa everything recited in claim 13. For example, Applicant is unable to find in Namekawa the things recited in claim 13 such as "a plurality of memory segments connected in parallel with each other between the first supply node and a plurality of internal nodes, wherein each of the internal nodes is to receive the voltage from the supply node" and "a plurality of switching units, each of the switching units connecting in series with a corresponding memory segment of the memory segments between the supply node and a corresponding internal node of the internal nodes, wherein each of the switching units includes an input node for receiving a select signal to electrically disconnect the corresponding memory segment from the corresponding internal node based on a state of the select signal".

Accordingly, Applicant requests reconsideration, withdrawal of the rejection, and allowance of claim 13. Dependent claims 14-16 and 76 depend from claim 13 and recite the things of claim 13. Thus, Applicant believes that claims 14-16 and 76 are patentable over Namekawa for at least the reasons presented above regarding claim 13, plus the additional things recited in claims 14-16 and 76. Accordingly, Applicant requests reconsideration, withdrawal of the rejection, and allowance of claims 14-16 and 76.

Applicant believes that independent claim 48, as amended, is patentable over Namekawa because Applicant is unable to find in Namekawa everything recited in claim 48. For example,

CIRCUITS AND METHODS FOR REPAIRING DEFECTS IN MEMORY DEVICES

Dkt: 303.859US1

Applicant is unable to find in Namekawa the things recited in claim 48 such as "a plurality of memory segments, each of the memory segments including a plurality of memory cells connected to a first internal node and a second internal node, the first internal node to receive the first supply source from the first supply node, the second internal node to receive the second supply source from the second supply node, each of the memory cells including: a first storage node and a second storage node; a latch connected to the first and second storage nodes and connected in between the first internal node and the second internal node; a first access element for accessing the first storage node; and a second access element for accessing the second storage node", "a plurality of first switching units, each of the first switching units connecting in between the first supply node and a corresponding memory segment of the memory to prevent the corresponding memory segment from receiving the supply source from the first internal node connected to the corresponding memory segment when the corresponding memory segment has a defect", and "a plurality of second switching units, each of the second switching units connecting between the second supply node and a corresponding memory segment of the memory segments to prevent the corresponding memory segment from receiving a supply source from the second internal node connected to the corresponding memory segment when the corresponding memory segment is defective". Accordingly, Applicant requests reconsideration, withdrawal of the rejection, and allowance of claim 48. Dependent claims 49-57 depend from claim 48 and recite the things of claim 48. Thus, Applicant believes that claims 49-57 are patentable over Namekawa for at least the reasons presented above regarding claim 48, plus the additional things recited in claims 49-57. Accordingly, Applicant requests reconsideration, withdrawal of the rejection, and allowance of claims 49-57.

Applicant believes that independent claim 58, as amended, is patentable over Namekawa because Applicant is unable to find in Namekawa everything recited in claim 58. For example, Applicant is unable to find in Namekawa the things recited in claim 58 such as "a memory array connected to the supply node via a supply path for receiving the voltage source, the memory array including a plurality of memory segments, each of the memory segment to receive the supply source via a portion of the supply path" and "a supply control circuit connected in the supply path for isolating a corresponding memory segment of the memory segments from the portion of the supply path connected to the corresponding memory segment if the corresponding

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

Serial Number: 10/609,312

Filing Date: June 24, 2003

Fitle: CIRCUITS AND METHODS FOR REPAIRING DEFECTS IN MEMORY DEVICES

Page 10 Dkt: 303.859US1

memory segment is defective". Accordingly, Applicant requests reconsideration, withdrawal of the rejection, and allowance of claim 58. Dependent claims 59-62 and 77 depend from claim 58 and recite the things of claim 58. Thus, Applicant believes that claims 59-62 and 77 are patentable over Namekawa for at least the reasons presented above regarding claim 58, plus the additional things recited in claims 59-62 and 77. Accordingly, Applicant requests reconsideration, withdrawal of the rejection, and allowance of claims 59-62 and 77.

Applicant believes that independent claim 63, as amended, is patentable over Namekawa because Applicant is unable to find in Namekawa everything recited in claim 63. For example, Applicant is unable to find in Namekawa the things recited in claim 63 such as "determining a condition of a memory device, the memory device including a plurality of memory segments, each of the memory segments connecting to a corresponding internal node of a plurality of internal node to receive a supply source from the corresponding internal node" and "isolating a selected memory segment of the memory segments from the corresponding internal node connected to the selected memory segment if the selected memory segment is defective to prevent the selected memory segment from receiving the supply source at the corresponding internal node connected to the selected memory segment". Accordingly, Applicant requests reconsideration, withdrawal of the rejection, and allowance of claim 63. Dependent claims 64-65 and 78 depend from claim 63 and recite the things of claim 63. Thus, Applicant believes that claims 64-65 and 78 are patentable over Namekawa for at least the reasons presented above regarding claim 63, plus the additional things recited in claims 64-65 and 78. Accordingly, Applicant requests reconsideration, withdrawal of the rejection, and allowance of claims 64-65 and 78.

## **Reservation of Rights**

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided

Serial Number: 10/609,312 Filing Date: June 24, 2003

Title: CIRCUITS AND METHODS FOR REPAIRING DEFECTS IN MEMORY DEVICES

under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

## **CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6969 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

KENNETH W. MARR

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

(612) 373-6969

Date 5-21-2007

Viet V. Tong

Reg. No. 45,416

KATE GANNON

Signature

Name